

MINUTES

CALIFORNIA TRAFFIC CONTROL DEVICES COMMITTEE (CTCDC) MEETING Sacramento, May 8, 2002

The second meeting of the CTCDC in 2002 was held in the Caltrans Office in Sacramento, on May 8, 2002.

Chairman Jim Larsen opened the meeting at 9:05 a. m. with the introduction of Committee members and guests. The following members, alternates, and guests were in attendance:

ATTENDANCE	ORGANIZATION	TELEPHONE
Members (Voting)		
Jim Larsen Chairman	CA State Association of Counties County of Tulle	(559) 733-6291
John Fisher Vice Chairman	League of CA Cities City of Los Angeles	(213) 580-1189
Devinder Singh	Caltrans	(916) 654-4715
Ike Iketani	CHP	(916) 657-7222
Wayne Tanda	League of CA Cities City of San Jose	(408) 277-4945
Dwight Ku	California State Automobile Association, Auto Club	(415) 241-8904
Farhad Mansourian	CA State Association of Counties County of Marin	(415) 499-6570
Richard Backus	Auto Club of Southern California	(714) 885-2326

ALTERNATES	ORGANIZATION	TELEPHONE
Ed von Borstel	League of CA Cities City of Modesto	(209) 577-7222
John Presleigh	CA State Association of Counties County of Santa Cruz	(831) 454-2160
Jacob Babico	CA State Association of Counties San Bernardino County	(909) 387 8186
Julie Page	CHP	(916) 657-7122

ATTENDEES	ORGANIZATION	TELEPHONE
Bill Wald	Caltrans HQ-ITS	(916) 651-9048
Jerry Williams	BlinkerStop/TAPCO	(800) 955-7865
Dale Jones	BlinkerStop Sign	(800) 955-7865
Michael Harrison	LightGuard System, INC	(707) 542-4547
Theresa Gabriel	Caltrans HQ-ITS	(916) 654-5039
Gene Lozano	California Council of the Blind	(916) 485-8307
Don Kysor	California Council of the Blind	(510) 537 7877
Roger Bazeley	SFPTA-School Safety District-2	(415) 673-3652
David Roseman	City of Long Beach	(562) 570-6665
Eduardo Serafin	City of Napa	(707) 257-0520
Peggy Veeder	Caltrans D11	
Denis Anderson	3M	(800) 955-7865
Stephen Ford	Mendocino County DOT	(707) 463-4363
John Reynolds	Caltrans Maintenance	(559) 488-4194
Jose Alire	City of Fountain Valley	(714) 543-4517
Dennis Dunn	County of Sacramento DOT	(916) 875-5415
Randy Foust	County of Sacramento DOT	(916) 875-5412
Gary Smith	City of Sacramento	(916) 264-8364
David MacGregor	LA County DPW	(626) 300-4713
Priscilla William	BlinkerStop Sign	(559) 627 1995
Ray Chapman	Sacramento	
Ron Northunso	City of San Jose	(408) 277-4304
Jim Helmer	City of San Jose	(408) 277-4304
Jennifer Day	San Jose State University	(408) 277-4304
Tamara Nix	City of San Jose	(408) 277-4304
Bob Brow	County of Sacramento	(916) 875-5133
Lynn Mack	Polara Engineering	(888) 340-4872
Ed Campbell	Polara Engg/Traffic Safety	(707) 428-5417
Bob Planphold	Senior Action Network, SF	(415) 431-6453
Damian Pickering	Lighthouse, SF	(415) 431-8184
Dave Juckspw	California Council Blind	(415) 239-1873
Rosemarie Goglion	County of SLO, PWD	(805) 788-5590
Jane Kardas	California Council Blind	

CTCDC MINUTES

May 8, 2002

Page 3 of 23

Betty Green
Barbara Kron
Catherine Skivers

Johnny Bhullar
Hollynn D'Lil
Reh-Lin Chen

California Council Blind
California Council Blind
President,
California of Council Blind
Caltrans/Traffic Ops
CODCIP
City of Berkley
1947 Center St, CA 94704

(510) 537-7877

(916) 654-7312

(510) 981-6403

MINUTES

Adoption of January 31, 2002 CTCDC meeting minutes.

Wayne Tanda suggested that when an agenda item is approved for experimentation, the minutes should reflect under Action: "the item is approved for experimentation", not as, "item completed", because item is still pending. The Committee Secretary noted that he would incorporate suggested wording in future minutes.

MOTION: Moved by Wayne Tanda, seconded by John Fisher, to adopt the minutes of the San Bernardino meeting, held on January 31, 2002. Motion carried 8-0.

MEMBERSHIP

Chairman Larsen paid tribute to two outstanding engineers Paul Fowler and Tom Montgomery, who passed away in the recent months and shared their contribution to the profession of Traffic Engineering. Gerry Meis, Merry Banks and Ray Mellen, voting members, did not attend the meeting. Their alternates were Devinder Singh, Richard Backus and Dwight Ku, acting voting members.

PUBLIC COMMENTS

Chairman Jim Larsen asked for any public comments related to items that will not be discussed as an agenda item.

Roger Bazeley, San Francisco Parent Teachers Association (PTA) shared a variety of suggestions for enhancing safety through school zones and also addressing the needs for seniors and disabled persons.

Chairman Larsen suggested that should individuals desire to propose changes in current signing and delineation practices, they need to approach their local jurisdictions and seek sponsorship presenting such ideas to this Committee.

Mike Harrison, LightGuard, told the Committee that the City of El Segundo has submitted a request to install in-roadway warning lights at mid-block crosswalks. Mike added that the request was to expand the ongoing experimentation in the City of Anaheim. Chairman Larsen responded that the item is not on the agenda, therefore, the Committee cannot act on this item. The Chairman reminded everyone that although a traffic control device has been approved by the Committee for experimentation, any new location or expansion requires the Committee's approval. Devinder Singh, Committee Secretary, added that he received a request from the City of El Segundo a few days prior to the meeting, when the Guidelines for Experimentation required all new requests to be submitted at least 45 days before the meeting. Devinder further added that he has communicated with Sgt. Roger Stephenson in the past in regards to this request. Information was e-mailed to Sgt. Stephenson on the process of how to experiment with a traffic control device.

AGENDA ITEMS

PUBLIC HEARING

02-3 RIGHT EDGELINE (Proposal to amend Section 6-02.4 of the Traffic Manual)

Jim Larsen stated that this item was an outgrowth of agenda item 00-4, "use of raised pavement marking in a transverse pattern". The Chairman asked Devinder to apprise the Committee. Devinder stated that the following verbiage is proposed to be added under the current Section 6-02.4 "right edgeline" of the Traffic Manual:

"In general, raised pavement markers are not used to supplement the right edgeline. The use of raised pavement markers on the right edgeline may lead the motorists to believe there is another lane to the right of the markers. If either retroreflective or non-reteroreflective raised pavement markers are used on a right edgeline, an engineering study should be conducted documenting the reasons for their use."

The Chairman asked for comments from the members. Devinder noted that the current standards on the right edgeline in the State Traffic Manual, Section 6-02.4 and MUTCD 2000, Section 3B.04 requires that the right edgeline shall be a white solid line. In addition to that, the MUTCD 2000, Sections 3B.13 and 3B.14 states, "the raised pavement markers should not supplement right edgeline markings."

The Chairman opened the public hearing.

Steve Ford, Traffic Engineer, from Mendocino County, stated that he has done some research on the policy of striping the right edgeline and centerline. There is a conception in the traffic engineering community that the placement of the raised pavement markers (RPMs) on right edgelines may lead motorists to believe that there is a lane to the right of the markers. He suggested that there should be a study to backup this notion. He further added that Federal Highway Administration (FHWA) has conducted a study on the use of reteroreflective raised pavement at the curves on two-lane rural highways. The study indicated that the motorists were able to see the curvy alignment of the roadway sooner. He suggested that the use of reflective markers on the curvy two-lane roadways would be a great help to traffic in negotiating those curves safely.

Mike Harrison, LightGuard, suggested that the use of reflective raised markers on the right edgeline would help the traffic during dark and foggy conditions. He further added that their use may be limited only at the curvy alignments and should not be placed when a roadway has half a mile or more of straight alignment.

Roger Bazeley stated that he also supports better delineation on the highways that have curvilinear alignment and drop-offs next to the travelway. He noted that in the State of Nevada, the right edgeline is much wider compared to those in California, and wider lane markings are more visible to traffic. He also suggested the use of more reflective devices to delineate cement

walls (concrete barriers) on the freeways and more reflective devices at curvy and drop-off areas to delineate the edge of roadways.

Chairman Larsen asked for other comments from the public, there were none. Chairman Larsen closed the public hearing and opened discussion from the Committee members.

Farhad Mansourian noted the notion that the use of RPMs on the right edgeline may lead the motorist to believe there is another lane to the right may be true on multilane divided highways. However, after driving on two-lane rural highways for miles and miles, motorists tend to adopt these conditions. His jurisdiction has miles and miles of two-lane rural highways with curvy alignment and steep drop-offs next to the travelway. Under the current standards, if an agency has placed RPMs on the right edgeline, the agency is not in compliance with the standards. The proposed language will allow them to use an engineering study to justify the use of RPMs on the right edgeline. This will provide flexibility to the agencies. He noted that this issue was discussed in detail during the last meeting and he is ready to introduce a motion adopting the proposed language to the Traffic Manual.

Wayne Tanda pointed out to Committee members the letter written by Consultant David Royer to Committee member John Fisher. David suggested a different layout pattern for the RPMs on the right edgeline in comparison to the lane-line. It will help reduce confusion of another traffic lane to the right of the markers. The letter further indicated that the proposed verbiage does not provide any guidance about the pattern for the placement of RPMs on the right edgeline, which will allow agencies to place them the way they want.

John Fisher noted that every speaker has raised good points. There are two-lane highways, which flare to multilane facilities, and sometimes provides passing lanes. At the same time, there are two-lane highways where you cannot see beyond the pavement during the dark hours. However, if you place RPMs, some might think there is another traffic lane to the right. He agreed with David's suggestion in developing a pattern to place RPMs supplement to the right edgeline, which is different than for lane lines.

Richard Backus suggested adopting the proposed verbiage and suggested that Caltrans develop a pattern for the layout of detail 27B which shows supplement RPMs.

Chairman Larsen asked for other comments, there were none.

MOTION: Moved by Wayne Tanda, seconded by Farhad Mansourian, adopting the proposed verbiage with amendment as follows:

“In general, raised pavement markers are not used to supplement the right edgeline. The use of raised pavement markers on the right edgeline may lead the motorists to believe there is another lane to the right of the markers. If either retroreflective or non-reterorelective raised pavement markers are used on a right edgeline, an engineering study should be conducted documenting the reasons for their use and the marking should be consistent with the guidelines contains in the Traffic Manual.”

John Fisher suggested changing the wording from, *"In general, raised pavement markers are not used"* to *"In general, raised pavement markers should not be used."*

Wayne and Farhad agreed with John's suggestion.

MOTION: Moved by Wayne Tanda, seconded by Farhad Mansourian, adopting the proposed verbiage with amendment as follows:

"In general, raised pavement markers should not be used to supplement the right edgeline. The use of raised pavement markers on the right edgeline may lead the motorists to believe there is another lane to the right of the markers. If either retroreflective or non-reterorelective raised pavement markers are used on a right edgeline, an engineering study should be conducted documenting the reasons for their use and the marking should be consistent with the guidelines contained in the Traffic Manual."

Motion passed 8-0.

ACTION: Item completed and request was made to Caltrans to consider recommended verbiage under Section 6-2.04 "right edgeline" and develop appropriate guidelines.

01-11 PORTABLE OR TEMPORARY SPEED DISPLAY SIGN

Chairman noted that this item is a continuation from previous meetings and Caltrans was asked to make the determination whether speed display signs are traffic control devices or not.

Chairman Larsen asked Devinder to update the Committee.

Devinder stated that during the last meeting the question was raised on whether a "speed feedback sign" is a traffic control device or not. Committee Member John Fisher requested that Caltrans provide a statement as to whether it believes the speed feedback sign is a traffic control device and if it seeks the Committee's guidance on standardization. Devinder noted that he received an e-mail from Matt Schmitz of FHWA. The e-mail indicated that FHWA has proposed to make the sign portion of the speed feedback sign a "traffic control device." Devinder pointed out the last paragraph on page 9 of 32 of the agenda packet that indicates the FHWA proposal as follows:

"The MUTCD team is proposing to specifically include the "YOUR SPEED XX" dms/cms speed trailer in the speed limit signs section of Part 2B of the MUTCD in the NPRM (Revision #2); that will make the "sign" portion of a speed display trailer a traffic control device within the approved colors for signs/CMS displays in Table 2A-4 which will include white, yellow, FYG as colors (also includes reverse screens); orange LED's are for Part 6 application only."

Chairman Larsen opened the public hearing.

Roger Bazeley stated that this particular device should be qualified as an advisory sign. This device provides information to the motorist whether they are going the speed limit or over the speed limit and the motorists can adjust their behavior accordingly. He further added that this is

another tool in educating motorists. Some PTAs have offered to buy speed trailers and donate them to the cities. This device is especially useful in some areas like where there is a downhill grade. It gives motorists an opportunity to correct their behavior. Many PTAs in California want the school-zone speed limit to be enforced from the beginning to end of the school-zone because there is always pedestrian activity during school hours. Roger also mentioned there is pending legislation that will make the school areas a “double fine” zone.

Chairman Larsen asked for other comments from the public, there were none. Chairman Larsen closed the public hearing and opened the item for Committee discussion.

Farhad Mansourian asked about the significance of whether the Committee says it is or is not a traffic control device. The device has been used already and is still being used.

Devinder responded that during the last meeting a question was raised that if this is a traffic control device, then the Committee could provide guidance to Caltrans in developing standardization.

Wayne Tanda refreshed the Committee on the original request that came from the City of Palm Desert. The City of Palm Desert asked the Committee’s opinion on whether the speed feedback sign is a traffic control device or not. Since then, different opinions have been formed. Wayne further suggested that there might be a need to revisit the definition “Official Traffic Control Devices.” Section 440 of the California Vehicle Code (CVC). The feedback signs and some other devices are not defined in the CVC Section 440.

John Fisher asked that if this were a new traffic control device, and if the City of Palm Desert decided to use it, would they be installing the device under the experimentation process. Wayne responded that if the FHWA determines this is a traffic control device, then California could use the guidance developed by the FHWA or Caltrans could develop the standards for this device with the help of the CTCDC. Then, experimentation is not needed.

Jacob Babico stated that the speed display sign is not a fixed message like other signs. This device responds to the motion of the body and it is a changeable message sign.

Devinder suggested that the Committee wait for the FHWA final ruling on this device and at that time discuss whether to adopt the FHWA policy or develop California policy and standards. Chairman Larsen asked for other comments, there were none.

MOTION: Moved by Farhad Mansourian, seconded by John Fisher. Table this item until such a time that the Revision #2 of the MUTCD is approved, then the Committee can revisit this issue at that time. Motion passed 8-0.

ACTION: Item tabled.

01-5 ACCESSIBLE PEDESTRIAN SIGNALS

Chairman Jim Larsen noted this item is a continuation from previous meetings. He recognized the large group who present in the audience to discuss this item. He requested the participants not to repeat the comments and if there is a group spokesperson, he /she can recognize the supporters to the Committee. Chairman Larsen asked sponsor John Fisher to address the item.

John Fisher noted that during the September 2001 meeting a motion was presented to adopt the Millennium MUTCD 2000 language on accessible pedestrian signals (APSS) in the Traffic Manual. The motion failed, because at that time, a revision was proposed to the APSS language by the FHWA. A few weeks ago, the FHWA adopted the final language on APSS. The MUTCD language not only talks about the bird-chirp sound which is in the Traffic Manual, but has included different devices which communicate with blind pedestrians, such as, the verbal message, vibrotactile, locator tones and push-buttons. During the January 2002 meeting, the Committee members asked the staff to provide a summary on APSS outlining the differences between the Traffic Manual, the MUTCD and the resolution submitted by the California Council of the Blind (CCB). In response to the request, a two page summary table was included in the agenda packet, which gives a general idea on different subject matters, such as, general philosophy on these devices, the role of outside experts, the application of bird chips sound and verbal message, the use of vibro-tactile devices, push-button locator tones and the role of pedestrian push-buttons. In this summary table, the proposal submitted by the CCB through a letter dated December 21, 2001 and Resolution 2001B-5 was included, while Resolution 99-11 Adopted by the National Federation of the Blind (NFB) was not included. The resolution passed by the NFB was included in the agenda packet. The position of the NFB is on record opposing the wholesale installation of these signals by states or by local governments.

Chairman Larsen opened the public hearing.

Gene Lozano, Chairperson, Committee on Access and Transportation, CCB, apprised that the CCB had meeting during November 2001 and discussed various issues related to the APSS. Resolution 2001B-5 was adopted by the CCB on the requirement of APSS and submitted to the CTCDC. The CCB wants to reinforce the ADA Title2, Rehabilitation Act of 1973, and the Transportation Equity Act of first century and many State pieces of legislation and regulations. The traffic signals are a physical program and must be made accessible to the visually impaired pedestrians (VIPs). All new traffic signals or upgrading of the existing signal must include accessible devices and there should be a process in place to address the existing signals. The APSS not only serve the VIPs, but they serve the entire pedestrian community, including seniors, children, the disabled and pedestrians with hearing loss. Gene apprised the Committee that during the last census, one out of five individuals were disabled and those over 65 have 50% of the population with one or more disabilities, which limits their activities. Gene noted that during the last CTCDC meeting a question was raised about the need of APSS. The CCB believes that whenever a signal is proposed, there is a justification study conducted by the agency having jurisdiction on the roadway. If a decision was made to provide pedestrian provisions, then the devices for the VIPs must be included. During the January 2002 meeting, a liability issue was raised. Gene stated that when Caltrans adopts a device and develops standards and specifications for that device, then the liability issue should not be a concern. Gene added that there have been

numerous studies conducted on the APSs, and studies have indicated that the audible devices provide safe access. MUTCD Section 4E.02 makes pedestrian push-button optional. Gene submitted a study for the record prepared by the City of Sacramento on audible signals and also reminded the Committee about the May 1, 2002 letter written in regards to the legal requirements to install APSs.

Don Kysor, Director of Government Affairs for the CCB, stated that he supports the testimony presented by Gene Lozano and he believes strongly in audible pedestrian signals. Don gave an example of one of the intersections in his neighborhood (West El Camino Avenue and Truxel Road in Sacramento), that improved the safety of pedestrians after the installation of audible pedestrian signals. Don also cited that MUTCD 2000 Section 4E.06 and 4E.08 have deficiencies and the Committee should adopt the MUTCD verbiage with the amendments, which mandate the APSs on all signalized intersections. The presence of locator tones is important because it assists the blind and visually impaired pedestrians. These devices are not about whether you have training from orientation and mobility; it is about the people who just become blind. These devices are for the senior population and all of you know that safety is the lowest denominator.

Bob Planphold, Senior Action Network San Francisco, stated that his organization was behind the legislation that imposed a \$271 fine in bus zones and blue parking zones. He stated that his organization was a supporter of the pedestrian countdown signal heads. Bob presented a bar chart taken from the Metropolitan Transportation Commission on US Prevalence of Selected Impairments within Age Group. Bob compared this chart to the table that was in the agenda packet, showing a comparison between the Traffic Manual, MUTCD and CCB proposal. Bob suggested to the Committee to at least go with the MUTCD, but realize at the same time that the CCB proposal is better. Bob gave statistics from the 1990 consensus, which shows that 33.8% of people between the ages of 70 and 74 have a visual impairment. The 63.1 % of people age 85 years and above have a visual impairment. The 31-1/2% of people between the ages of 70 and 74, and 48 1/2% of people 85 years and above have a hearing impairment. The MUTCD language says that a disabled pedestrian can follow the stop and go traffic noise. This is probably true for some, but this will be a problem for the aging seniors whose vision and hearing decrease with age. In addition, installation of the APSs upon request is an illogic approach. The ADA requires accessible passes for everyone. The Bay Area alone has 1.4 million people with a disability based on the 1990 consensus. Bob further added that the Committee needs to look at a uniform path of travel for the disabled pedestrians to move ahead with the adoption of audible signals.

Damian Pickering, Director of Public Affairs of Lighthouse, stated that he agreed with the CCB interpretation that pedestrian signals is a service program or an activity of a municipality that should be addressed for all pedestrians, not only the sighted or able bodied. Although, the ADA may not specify about given types of signals needed to be accessible, but when a pedestrian countdown signal heads goes in, at that point, the signal system should also be equipped with accessible devices. He pointed out that the lighthouse organization is the largest organization that serves the blind in Northern California, and this organization has reached its 100-year-old milestone this year. As an organization serving the blind, this is a non-partisan organization and is not behind what CCB or NFB does. Therefore, from their point of view, he cautions the Committee not to find an easy way out. The CTCDC may see differences of opinion between

these two organizations, which serve the blind community. Nevertheless, the Committee's view is to serve the entire public, and he urged the Committee to view these resolutions in that light and adopt the new technology. As earlier stated by other speakers, the APSs not only serve the blind community, they serve a vast majority of pedestrians.

Ronda King stated that she used to have full vision until the age of 30. Then from that point on, she lost her vision and lost hearing in her left ear. She stressed that pedestrian signals are a necessity for all pedestrians to cross safely at a roadway. She shared her experience as a sighted pedestrian and now as nonsighted pedestrian. She further stressed that APSs are extremely helpful to seniors and all other pedestrians.

Ezio Elviti thanked the Committee for giving the opportunity to share his thoughts. He reminded the Committee about his letter dated April 18, 2002. Ezio noted that during the last meeting, a few comments were made about the installation of the APSs based on their need, cost and safety. He added that if the devices are adopted, there will be a competition and cost will come down dramatically, then secondly, these devices have longevity. Based on need, he stated that he is involved in a request in the Bay Area, on behalf of a blind pedestrian, and has not received any positive response from the agency having jurisdiction on the roadway. He further stated that a comment was made that routine installation of the APSs may compromise the safety of blind pedestrians at some intersections. He stated that if an intersection is designed to be safe for some pedestrians, it should be safe for all pedestrians. He suggested that having a three-second delay would solve the question raised in regard to the noise problem without the devices properly being used. The education should help the purpose of a three-second delay and it would solve most of the questions raised by individuals that the devices would not be used and that they will create environmental problems in the neighborhood.

Jane Kardas supported the testimony of the previous speakers and stated that locator tone plays an important role in the APSs system. She added that she has traveled through Europe and was amazed to see how easy it was to find the availability of the APSs system at an intersection with the help of locator tone. She advocated having locator tones and push-button at the proper locations.

Barbara Kron also supported the testimony of Ronda King and added that she traveled through Europe and was delighted to see APS systems over there. She informed the Committee that she would like to see a similar system in California.

Veronica Elsea stated that she supports the CCB resolution and suggested adopting the MUTCD verbiage with the CCB proposed amendment. She also provided an update on the Santa Cruz ongoing experimentation project with the APSs. Veronica stated that she does not agree with Ezio's suggestion to have a three-second delay, because most people do not know how long they need to keep pushing the button down to activate the system. She added that users need to be told to keep the push button down until you hear the message is working, instead of the three-second delay. She noted that a locator tone is a phenomenal tool and many school children are using it. The ongoing experimentation project in Santa Cruz had received two complaints about the noise at one location, then after the sound was adjusted, there was no more complaint. She further added that if there is a need for consultation to discuss the installation of APS systems,

preferably it should be received from the Orientation and Mobility Instructor, but it should not be a mandated requirement. She supported the installation of APSs at all intersections and added that APSs help all pedestrians, not just the blind.

Katherine Skivers, President, CCB, supported the resolution submitted by the CCB and added that the APSs assist all pedestrians to cross safely. She noted that CCB works primarily for the blind, but they represent all the pedestrians, not only the blind.

HolLynn D'Lil, member of California Organization Disability Access Professional and sits on the Public Right-of-Way Access Advisory Committee (PROWAAC). She stated that PROWAAC has submitted their report to the U.S. Access Board and they are reviewing to finalize guidelines to add to the ADA guidelines. She added, primarily, all local agencies and local governments must comply with the ADA requirements. She read one paragraph from the draft PROWAAC report that all signals shall have the APSs provision. She expressed that the installation of the APSs on need assessment is not a logical approach, visually impaired pedestrians are all over. She supported that the APSs system should be on all the signalized intersections.

Chairman Larsen asked HolLynn if she had any updates on the status of the report. HolLynn responded that the US Access Board is preparing a final draft, which will be opened for public comments, after that, it will be submitted to the Department of Justice to be included into the ADA guidelines. HolLynn further added that she could not give the precise date when it would be implemented. Chairman Larsen noted that the reason he is asking the status is because the FHWA will be involved at some point to adopt these guidelines in to the MUTCD.

Ray Champman also supported to have more APSs be installed. He stated that one audible system recently installed close to the Mobil home park in Sacramento County is a great asset to the seniors who use the system to cross that roadway.

JDD Doran also advocated that there is a need to have more APSs and he reemphasized that based on the need assessment the system does not work. He has requested one in the City of Sacramento at the intersection of K/7th Street in 1998, and was told that it will take three years. He called after three years and the city staff told him he needs to call some time later. He added that the new system has options to adjust the sound level, which caused criticism from the neighborhood.

Theresa Gabriel, Caltrans HQ ITS Branch, stated some of the previous speakers had raised questions on her comments made during the January 2002 meeting. She noted that Caltrans follows ADA guidelines in their design process during the development of a project. She stated that part of the traffic signals study involved collection of field data. During that time, a detailed field survey included traffic counts, geometric, grade, pedestrian activities, school children, senior citizens and pedestrians who need special treatment, etc. The design of the signal system will accommodate all the needs that were identified in the study. She further added that there are signalized intersections in the remote area, the mandate of the APSs on all signalized intersections will be a burden in those conditions when the devices are not used. The comments were made about safety; Caltrans number one priority is safety for all the road users. There were

also comments made that the installation of the system based on need does not work. Theresa stated she would like to hear from the person who made the request where this request never received proper attention. She gave her business card where she could be reached. She recommended the adoption of the MUTCD verbiage in California.

Chairman Larsen asked if there was anyone else in the audience who wants to acknowledge their presence. There were four more people who raised their hands in the support of APSs. Chairman Larsen closed the public hearing and opened the item for Committee discussion.

Wayne Tanda inquired that at one time the CCB position was a minimum bird sound as the standard when audible signals are considered. Gene Lozano responded that the reference was to keep the California standard until such a time that the CTCDC formed a task force to hammer out the MUTCD language and come up with recommendations for California. The new Resolution 2001B-5 requiring a minimum birdcall or human voice was put together realizing that the CTCDC is not going to set up a task force, and CCB wants a minimum consistency and standardization for these devices. The reason to include a human voice was to eliminate the experimentation requirement for agencies, e.g. the City of Santa Cruz under obligation to conduct experimentation. The other reason is that having a human voice in certain situations is helpful, such as, if a right turn is signalized, the human voice can direct the pedestrian to walk to the island and then from the island to the curb.

Wayne further noted that every speaker has insisted having these devices as mandatory or where the agency provides pedestrian provisions. There are questions raised by the agencies about the cost, the proper use of the device and about auditory in the neighborhood when the device is not in use. There is no question if the devices have been used, but in certain situations, when the device would not be used and it would be a noise problem for the neighborhood.

Gene Lozano responded that in Sacramento County there are 63 locations equipped with audible signals and the majority of them are in residential areas. All of these locations have old technology, except one that has new technology. There were a few complaints about the noise. After sounds were adjusted, there were no more complaints. Gene further added that with the new technology, the noise is not a problem and it could be adjusted as needed. There are certain locations where these devices were installed without push buttons and the CCB recommendation is to install them with push buttons. The CCB wants to mandate these devices. If an intersection in a rural area would provide pedestrian signals, that intersection must have accessible devices. The other issue was raised about the cost, they are not as expensive as pedestrian countdown signals and as the demand increases, there would be more vendors in the market and the cost would go down significantly.

Dwight Ku commented on Theresa's statement about the traffic signals study procedures. He noted that if a disabled pedestrian used the facility regularly, but somehow the day the field survey was conducted, the pedestrian was away or has not used the facility, in that case, the study would not indicate any special treatment is needed. In other words, now that person has to make a separate request to accommodate his needs.

Frank from the City of San Carlos stated that there is a clear historical record of Caltrans willingness to have APSs installed on their roadways under their jurisdiction based on the scarcity of signals presently. Frank presumed that the current practice would be continued.

Chairman Larsen stated that during January of 2002, he attended a Transportation Research Board meeting, the public right-of-way access report was mentioned during the meeting. The report will be published in the Federal Register for comments. At some point, FHWA will be involved and guidelines will be presented in the MUTCD. At that time, the states will be responsible to comply with the MUTCD.

John Fisher stated that this was a learning period for everyone. Since the publication of MUTCD 2000, there were enhancements of the devices. He noted that whatever action this Committee will take today, would not be final and set in stone for the next ten years, but rather, it indicates a direction and movement to adopt a variety of devices and more devices to meet the demand of blind pedestrians.

Farhad Mansourian stated that we all are committed to making things better. He suggested we at least adopt the MUTCD verbiage and make these devices either mandatory or have a need assessment process in place. The need assessment will be prepared at the time of the project justifying why the agency would not install APSs. On the other hand, has need assessment been done at the request? He further stated that agencies are complying with ADA requirements on a number of issues, such as ramps, curb cuts, etc. He suggested having the hardware installed during the installation of new signals and turn on the system if it is needed, in which this would also be a proactive step. He suggested at least adopting the MUTCD verbiage and then start from there.

Katherine Skivers stated that the cost to install APSs should not be a barrier to provide safer access and she stressed the Committee move ahead with the decision without further delay. HolLynn stated that when the Committee adopts the policy on APSs, all the devices available in the market should be included. HolLynn further added that they are not mandating a particular system and requested the Committee move ahead with the decision. There was another comment from the audience (name was not clear) representing the East Bay, urging the Committee to adopt the APSs system and stated that verbal message and locator tone are really helpful to make a safe crossing.

MOTION: Moved by John Fisher, seconded by Farhad Mansourian, recommended Caltrans adopt the MUTCD 2000 Accessible Pedestrian Signals verbiage into the State Traffic Manual.

Chairman Larsen asked for discussion on the motion.

Wayne Tanda stated that after listening to all the speakers and Committee members, he supports the motion. However, at the same time, he would like see an item be placed on the agenda, under discussion, "Mandatory requirement of the APSs" during the new traffic signals or during the upgrading of the existing signals. Wayne expressed that the local agencies should provide feedback in regards to the pros and cons due to mandatory requirements of APSs. Farhad and John agreed with Wayne's suggestion.

Gene asked if CCB could provide written comments on the suggestion made earlier by one of speakers in regards to having a three-second delay for APSs.

Chairman Larsen responded that the CCB could submit written comments, if they wish to do so.

Veronica inquired as to whether the adoption of the MUTCD verbiage to the State Traffic Manual would relieve the City of Santa Cruz to carry out their study. Chairman Larsen responded that the city is still obligated to collect the data and present it to the Committee. Motion passed 8-0.

ACTION: Item completed and new item to be agendaized, “mandatory requirement of the APSs.”

ONGOING EXPERIMENTATION

00-8 PEDESTRIAN COUNTDOWN SIGNAL HEADS

Chairman Larsen asked sponsor Wayne Tanda to apprise the Committee on this item. Wayne introduced Jim Helmer, Deputy Director, Transportation, the City of San Jose, and his team members Ron Northhouse, Tamara Nix, Department of Transportation, City of San Jose, and Jennifer Day, final year student from San Jose State University, to present the final report to the CTCDC on the pedestrian countdown signal heads experiment (PCSHs).

Jim and Tamara Nix presented a power point presentation to the Committee and attendees. Jim noted that the City of San Jose received authorization from the CTCDC during the November 2000 meeting to stall PCSHs at five intersections. The City has included in their study the parameters outlined by the CTCDC during the June 2001 meeting. The report was prepared by the joint efforts of San Jose State University and City staff. The report was presented in two volumes, Volume 1 contains an overview of the existing studies and other relevant literature, the study approach, results of the study, results of the pedestrian behavior, motorist behavior, traffic conflicts and crash analysis. Volume 2 consists of appendices that contain more detailed reports of data collection and analysis.

Jim informed the Committee that the data collection for the before study was started during March of 2001 and continued through the May of 2001. The after study data was collected during the period of September 2001 through the March of 2002. The study consists of assessing pedestrian compliance, pedestrian behavior and pedestrian walking speed. The percentage of pedestrians that arrived during the flashing “Don’t Walk” (FDW) interval and waited for the next Walk interval decreased significantly from 22% before to 8% after. The percentage of pedestrians entering on the walk phase was decreased from 75% before to 70% after. The percentage of pedestrians entering on FDW was increased from 14% before to 15% after. The percentage of pedestrians entering on “Don’t Walk” (DW) decreased from 16% before to 15% after. The study further indicated that the proportion of pedestrians exiting during the FDW indication increased at all sites, while the proportions exiting during the DW decreased. This may be an indication that pedestrians were changing their walking behavior and they were using the countdown display to increase their walking speed. The number of pedestrians running,

stopping or turning around, hesitating as well as the number of pedestrians involved in a conflict were a relatively small number and do not indicate any pattern. The percentage of pedestrians understanding the meaning of FDW (without Countdown); 24% said, it is permitted versus 76% said it is not permitted. The percentage of pedestrians understanding the meaning of FDW (With countdown), 41% said it is permitted to cross versus 59% said it is not permitted to cross. 80% of pedestrians responded that they could begin the crossing if they believe they could finish the crossing before it counted to zero. This would indicate that the meaning of countdown signals is widely misunderstood by the pedestrian and the countdown signals may encourage the pedestrians to enter the intersection during the FDW.

The motorist entering the intersection on a yellow or red was monitored to determine whether the presence of countdown signals increased the proportion of motorists entering on yellow or red. The proportion of the violations was decreased, but the difference was small and there would not appear to be a logical explanation for the decrease. It may be concluded that there was no dissemble negative effect from the installation of the countdown signal.

In conclusion, Jim requested that the report submitted to the Committee is accepted as a complete report and the City is allowed to continue the use of the devices at five locations, until such a time that this Committee makes a final decision.

Farhad Mansourian commented that the data indicates that the use of PCSHs would decrease the overall use of the pedestrian phase because more pedestrians were able to cross and this would increase the time for the vehicles. This would be beneficial in a number of ways: less congestion, less pollution, etc.

John Fisher noted that the data indicated that the use of the PCSHs has increased the number of pedestrians entered during the FDW.

Jim Helmer responded that the pedestrians were able to make a decision as to whether they could make their crossing safely within the available time.

John Fisher asked whether the countdown was tied in with the signal phase? Does the countdown reach zero before there are a few seconds left in the yellow phase, or at the end of the yellow phase, or at the green for the cross traffic?

Ron responded that it depended on the cycle length.

Dennis Dunn, Sacramento County, asked whether the intersections under study were equipped with the pedestrian push buttons or with the system recall to walk.

Tamara Nix responded that three intersections have actuated push buttons and two with the non-pedestrian detection.

Theresa Gabriel stated that some of the intersection clearance for FDW was timed from curb to curb then started the yellow timing. The Traffic Manual allows the timing for the FDW from curb to the middle of the last lane and then finishing with the yellow timing. She expressed her

concern that some ongoing experiments do not follow the guidelines outlined in the Traffic Manual. The Committee is going to make a recommendation to develop standards, at least for consistency; ongoing experimentation projects should follow the guidelines outlined in the Traffic Manual.

Wayne Tanda responded that the City of San Jose uses different strategies to time the pedestrian walking phase compared to Caltrans. He suggested that the Committee look at how to close this item because there is a demand to install these devices. The Fountain Valley study, and City of San Jose study and partial study presented by the City of San Francisco indicated the devices were proven helpful in improving pedestrian crossings.

Roger Bazeley suggested that this device should also be tested in different demographic areas such as school zone and senior citizen areas.

MOTION: Moved by Farhad Mansourian, seconded by John Fisher, to accept the final report submitted on PCSHs by the City of San Jose and allow the city to continue the use of the devices, until the Committee makes a final decision. Motion passed 8-0.

Wayne Tanda suggested to place the PCSHs on agenda for the next CTCDC meeting, hence, the Committee can look at ways to bring all the different experiments together to make a decision on this item.

ACTION: Item completed.

REQUEST FOR EXPERIMENTATION

02-4 PEDESTRIAN COUNTDOWN SIGNAL HEADS

Chairman Jim Larsen introduced Rosemarie Gaglione, County of San Luis Obispo and asked her to address the Committee on the PCSHs experimental request. Rosemarie stated that the County is planning on signalizing the intersection of South Bay Boulevard/El Moro Street in the community of Los Osos. Currently the intersection is unsignalized, with a crossing guard on duty. The Middle School Children primarily use this intersection. The ADT is 10,000 and 85th percentile speed on the major street is 60 mph. Presently, the school crossing guard assists with school crossings. The County is planning on installing pedestrian countdown signal heads as a part of the signalization. The County will work with the school principal, school children, and with parents in educating the proper use of the device. The County will also collect the field data including the field survey and interviews to determine the affect of the device. The County will also monitor the operation of the device and requested a one-year period for the experimentation.

Chairman Larsen asked whether the School crossing guard would be continued or removed after the signalization. Rosemarie responded that the crossing guard could be kept for a temporary period during the transition, but eventually will be removed. Chairman Larsen pointed out to Rosemarie that the Committee has developed guidelines for the PCSHs study and suggested holding the copies of the City of San Jose study and the City of Fountain Valley study.

Wayne Tanda also suggested having a copy of the suggested parameters to include into the study and commented that a proposed location should be a good sample because of the school proximity. Wayne also suggested providing education to the School children about the meaning of countdown numerals.

MOTION: Moved by Wayne Tanda, seconded by Farhad Mansourian, to authorize experimentation with Pedestrian Countdown Signal Heads as requested by the County of San Luis Obispo. Motion passes by 6-0.

ACTION: Item approved for experimentation.

01-3 PEDESTRIAN COUNTDOWN SIGNAL HEADS (Expansion of the approved experimentation)

Chairman Larsen introduced Jose Alire, City of Fountain Valley, and asked Jose to address the request to expand the experimentation citywide on PCSHs.

Jose Alire briefly gave the overview on the final report submitted to the Committee on the pedestrian countdown signal heads (PCSHs) experiment conducted by the City of Fountain Valley. The data was collected before and after the installation of the PCSHs. The pedestrian timing was shown during the flashing "Don't Walk" (FDW) only. The countdown numerals reach to zero at the beginning of the yellow phase. The PCSHs heads were installed only at the main road crossing. The after results were very encouraging. The pedestrian finishing their crossings on the red dropped from 28.2% before installation to 15.8% after the installation. The percentage of pedestrian running to cross the roadway increased from 4.6% before installation to 14.6 after installation. The crossing on the FDW showed a significant decrease from 10% before to 5% after. The pedestrian beginning their crossing at FDW was slightly increased at the one location, which was heavily used by the pedestrians during lunchtime.

The most important findings of the Fountain Valley study are as follows:

- The percentage of pedestrians still in the crosswalk when the signal turned red showed a significant decrease after installation of the countdown pedestrian signals.
- The percentage of pedestrians starting to cross on the flashing don't walk phase showed a significant decrease.
- The percentage of observed vehicle and pedestrian conflicts showed a significant decrease.
- Pedestrian interviews showed an overwhelming percentage of participants stating the countdown signals were very helpful and better than the standard signals.

No observations were made of pedestrians noticing the time remaining and hesitating or aborting their cross. The pedestrians crossing at these locations vary from school children, residents in surrounding neighborhoods, commercial, restaurant activity, and the elderly.

There was a significant reduction in the observed pedestrian and motorist conflicts after the installation of the countdown pedestrian signals. The percentage of conflicts between

pedestrians and motorists dropped from 11.2% before installation to 4% after installation. Most conflicts that did occur were of vehicles passing through the crosswalk on a red and interrupting the pedestrians from completing the cross. Ninety percent of pedestrians indicated that the new signals were more helpful than standard pedestrian signals because it showed the time remaining to cross. About 50% of the interviews understood that it is a violation of the vehicle code to start crossing during the countdown numerals. One complaint indicated that there was not enough time for pedestrians to cross the street. Another was that kids are running ahead of crossing guards or parents in an attempt to beat the countdown and coming in conflict with vehicles. The city staff feels this is an education issue and not an issue with the countdown pedestrian signals.

Overall, results of the interviews were extremely positive. 70% found the countdown signals made them feel safer because they get a better idea of how much time is required to cross in a safe manner. Over 90% of the interviewees liked the new signals and said they were very helpful and better than the standard signals.

In closing, Jose Alire stated that their citizens like the PCSHs and they want more. Therefore, the city is requesting to expand PCSHs citywide and the city will continue collecting data. The city will post the survey on the website and analyze the accident data for those locations.

Wayne Tanda asked whether the city has determined the locations under the expansion of the experiment. Jose responded that the city has determined the 27 intersection at this point and funds are available for those locations. The city has a park called Mile Square Park and there are signals along that park, which are heavily used by pedestrians. The city mainly targets intersections with heavy pedestrian traffic.

Chairman Larsen reminded everyone that currently the device is not approved either at the national level or at the State level. The drawback is that if the approved devices have different standards or the device is not approved, in that scenario, the City is looking at a financial burden. Jose responded that the city is aware of the consequences.

MOTION: Moved by Farhad Mansouiran, seconded by Dwight Ku, to authorize the City of Fountain Valley to expand the experimentation on PCSHs citywide. If somehow the device is not approved or the standard is altered, the City will comply with recommendations. Motion passed 8-0.

ACTION: Item approved for the citywide experimentation.

DISCUSSION ITEMS

02-5 ESTABLISHMENT OF SPEED LIMIT ZONES BASED ON THE ENGINEERING AND TRAFFIC SURVRY

Chairman Larsen informed the Committee members and the audience that the sponsor of this item Jacob Babico had to return to San Bernardino and requested that this item to be continued for the next meeting.

02-6 AFFECT OF ADA REQUIREMENT ON TRAFFIC CONTROL DEVICES

Chairman Larsen asked sponsor Wayne Tanda to address this item. Wayne Tanda noted that the item was placed on the agenda upon his request, because during the past few meetings, several issues have been raised. One of them was, which jurisdiction within the State of California has responsibility for the traffic control devices within the public right-of-way. Wayne noted that it was always assumed that the California vehicle Code put that responsibility on the California Department of Transportation. The other issue was raised about the Committee's approval to authorize experimentation on PCSHs without including the accessible devices for the visually impaired pedestrians.

Chairman Larsen stated that this is a discussion item only and Devinder has received responses on both issues and asked to share responses with the Committee and audiences.

Devinder reminded that after the January 2002 meeting he received an e-mail from Mr. Gene Lozano requesting to place two items back on the agenda, which were approved for experiment. Those two items were 02-3 and 00-6, PCSHs experiment request from the City of Berkeley and from the City of San Francisco. The reason Gene stated in his e-mail was that the Committee had violated the ADA requirements, approving experimentation without including the accessible devices for the visually impaired pedestrian. Devinder further added that after consulting with the Caltrans Legal Council he asked Gene to provide a specific language or sections from the ADA which opposed the experimentation on a traffic control device without including devices for the visually impaired pedestrians. Gene responded through letter dated May 1, 2002 justifying their position. The copy of the letter was supplied to the Committee members by e-mail and hard copy was distributed this morning. Devinder further added that the Caltrans Legal Council prepared a brief response to Gene's letter dated May 1, 2002 and the council advised to share this with the Committee members and the audience. The response is as follows:

“In response to your letter of May 1, 2002, Caltrans is in complete agreement that the law requires every effort be made to ensure blind pedestrians are safe while crossing streets. What Caltrans do not agree with, however, is your position that the law precludes the CTCDC from experimenting with devices that do not include an auditory or similar component directed to the blind. Your position would mean that a visual countdown experiment could not be conducted at an intersection, despite the potentially enormous benefit to such groups as the elderly, unless a corresponding auditory countdown is included. There may, however, be specific reasons an auditory countdown would not be practicable, and may in fact be dangerous, whereas, a visual countdown would further

safety. Furthermore, auditory aids at signals are fairly new and still being tested. Thus, to require their inclusion on all new traffic control device experiments is premature and potentially dangerous. Caltrans do not believe that the law, be it the ADA or other federal or State statute, so limit a public body like the CTCDC that it cannot conduct experiments with devices not specifically directed to every disabled person or group.”

Chairman Larsen asked comments on the legal opinion, which was provided by the Caltrans Legal Council.

Gene Lozano stated that he still believes that the walk phase of the signals must be in accordance with the ADA guidelines (means to be accessible). Because, whenever an agency rehabs, upgrades or alters existing signals that would trigger the ADA requirements. He added that the CCB is not ready to ask the pedestrian portion of the countdown numerals to be made accessible to the blind pedestrian at this time. He added that Polara is coming with the devices, which could be tested for the visually impaired pedestrians.

Roger Bazely stated that he would like to see some experimentation with the PCSHs, which includes the accessible features.

Chairman Larsen asked about the second issue, which was that the traffic control devices are subject to the purview of the State of the Architect. Devinder stated that during the September 2001 CTCDC meeting Michael Mankin, State Architect, raised this question. After that Mankin wrote a letter dated October 15, 2001 (page 18 of 32 of the agenda packet of May 8, 2002) to the California Building Standard Commission (CBSC), requesting a determination from the CBSC whether the regulations adopted by the California Department of Transportation are Building Standards and if they are subject to the CBSC adoption process. The letter specifically asked that the Federal Highway Administration (FHWA) publishes the Manual on Uniform Traffic Control Devices (MUTCD), which contains national design, applications, and placement standards for the traffic control devices that includes signs, signals and pavement marking. The CBSC responded to Mankin's request through a letter dated February 25, 2002 (page 20 of 32 of the agenda packet of May 8, 2002). The CBSC concluded that the MUTCD, does not appear to meet the definition of building standards pursuant to Health and Safety Code (H&SC) Section 18908(d) and 18909 (a) through (c), which defines the terms: building and building standards. CBSC further added in their response that H&SC Section 18908 (d) explicitly does not include highways as a building.

Chairman Larsen noted that the issue raised by Michael Mankin, State Architect, seems to be resolved with the response from CBSC. Chairman Larsen asked for comments on this matter.

Gene Lozano stated that the FHWA is considering including detectable warning devices as traffic control devices. Currently, the detectable devices are under the ADA guidelines and are part of the building standards, which includes ramps, pedestrian islands and curb cuts. Gene further added that in the Building Code, under the Title 24, Part 2, Chapter 1133b.6, there is a requirement to have a “texture band” at the push button for the blind pedestrians and it was never implemented. It is a gray area and needs to be clarified. Gene inquired if a Pedestrian Island in the median is a traffic control device.

Devinder noted that based on California Vehicle Code Section 440 islands, curbs, traffic barriers speed humps, speed bumps are not traffic control devices, but they are other roadway design features.

Theresa Gabriel responded to Gene's question regarding the band requirement on the pedestrian push button. Theresa recalled that there was a requirement to place a yellow band of texture material on the top of the pedestrian push-button (PPB) sign for the visually impaired pedestrians. Theresa added during the same time Caltrans adopted a policy to install audible pedestrian signals, if needed, for the visually impaired pedestrians. The purpose of the yellow band was to assist the visually impaired pedestrians in finding whether the signalized intersection has pedestrian crossing provisions. With the adoption of the audible signal policy, the requirement to have yellow band was dropped, because the audible signals were considered safer and more effective for the visually impaired pedestrian. Furthermore, with the adoption of MUTCD, the whole issue will be readdressed.

John Fisher added that he had the opportunity to review a preliminary report prepared by Billie Louise Bentzen, Janet Barlow and Lukas Franck and supported by the Environmental Access Committee of the Orientation and Mobility Division of the Association for Education and Rehabilitation of the Blind and Visually Impaired. The authors are respected for their efforts in working with the blind community for many years and they advise the Signals Technical Committee of the National Committee on Uniform Traffic Control Devices. The report analyzed the pros and cons of providing information to the visually impaired during the Upraised Hand signal interval. They ultimately concluded that the provision of information to the visually impaired during the Upraised Hand interval might mask auditory information from cars that may be more critical and might detract from the ability to cross safely.

Gene stated that he is not in disagreement with that report and therefore experimentation is needed to determine if PCSHs are safer for the visually impaired pedestrians.

Farhad Mansourian stated that there is Assembly Bill 2369 sponsored by Assembly member Salinas called Transportation Accessibility Bond Act of 2002, for the amount of \$500 million. If passed and signed by the Governor that money will be allocated to financing transportation improvements designed to improve access to transportation facilities for the disabled persons.

Chairman Larsen noted that there was no more issue at this time and item is closed.

INFORMATION ITEMS

99-11 MUTCD ADOPTION BY CALTRANS

Chairman Larsen asked for an update on the MUTCD adoption process. Bill Wald, Caltrans, ITS branch, noted that draft on Part 4 Highway Traffic Signals MUTCD California Supplement was mailed to CTCDC members for review and comments. There was a brief discussion as to how to proceed with review process. Chairman Larsen stated that the Committee members would go through the draft then they would meet with Caltrans representatives to go over their

comments. The Committee members will meet with Caltrans on July 18, 2002 to discuss Part 4 Highway Traffic Signals MUTCD California Supplement.

OFF THE AGENDA

Chairman Larsen asked for general comments. Wayne Tanda stated that he wants some items to be considered during the next meeting. The items are Caltrans experiment with “variable warning signs on curves”, “variable speed zoning contingent upon weather” and sign “children at play.” In addition, he would like to know why Caltrans does not follow the same process as other agencies. Wayne also added that he met Scott Wainwright, who works with FHWA and Scott was involved in the revision of the MUTCD process. Scott indicated that he and the members of the FHWA are keen to meet this Committee to go over experimentation process. John Fisher stated that he would invite Scott to meet or attend the CTCDC meeting.

NEXT MEETING

The next CTCDC meeting will be on August 22, 2002. The meeting will be held in Southern California.

ADJOURNMENT: The meeting was adjourned at 4 PM.